Phase I Appendix

Economic Growth Region 11

Shawnee Trace Workforce Investment Board 1019 N. 4th Street, P.O. Box 887 Vincennes, Indiana 47591	Southwest Indiana Workforce Investment Board 701 N. Weinbach Avenue, Suite 810 Evansville, Indiana 47711

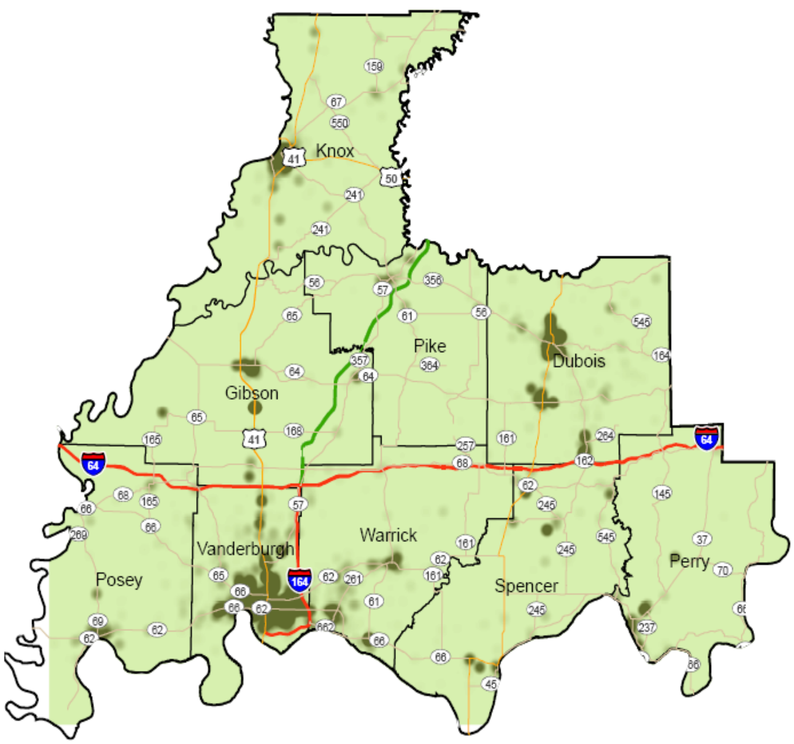

Table of Contents

Which Industries Employ the Greatest Number of Workers?

In Region 11, there were 206,826 wage-earning workers in 2004 down 1,577 or 0.8% from 2000. The Region's top five employment sectors account for 126,173 jobs, 61.0% of the region's total. Manufacturing with 45,359, 21.9% of total employment in 2004 was the regions top job producing sector. The table below shows the number of jobs in each of the major North American Industrial Classification industries sectors.

Total of All Wage Earning Jobs In Region 11 By Industry Sector For 2000 And 2004

		Jobs					
		2004		2000		Change 2000 - 2004	
NAICS	Industry	Total	Percent of Total	Total	Percent of Total	Total	Percent Change
	Total	206,826		208,403		-1,577	-0.8%
11	Agriculture, Forestry, Fishing and Hunting	N/A		917	0.4%		
21	Mining	1,958	0.9%	1,540	0.7%	418	27.1%
22	Utilities	2,726	1.3%	2,669	1.3%	57	2.1%
23	Construction	11,509	5.6%	11,802	5.7%	-293	-2.5%
31-33	Manufacturing	45,359	21.9%	47,497	22.8%	-2,138	-4.5%
42	Wholesale Trade	8,320	4.0%	8,508	4.1%	-188	-2.2%
44-45	Retail Trade	23,999	11.6%	25,767	12.4%	-1,768	-6.9%
48-49	Transportation and Warehousing	9,466	4.6%	10,006	4.8%	-540	-5.4%
51	Information	3,674	1.8%	3,539	1.7%	135	3.8%
52	Finance and Insurance	4,990	2.4%	6,380	3.1%	-1,390	-21.8%
53	Real Estate and Rental and Leasing	2,407	1.2%	2,480	1.2%	-73	-2.9%
54	Professional, Scientific, and Technical Services	5,674	2.7%	5,411	2.6%	263	4.9%
55	Mngmnt of Co. and Enterprises	4,159	2.0%	3,094	1.5%	1,065	34.4%
56	Admin and Support and Waste Mngmnt and Remediation Services	7,047	3.4%	6,904	3.3%	143	2.1%
61	Educational Services	14,827	7.2%	14,064	6.7%	763	5.4%
62	Health Care and Social Services	26,301	12.7%	24,614	11.8%	1,687	6.9%
71	Arts, Entertnmnt, Rec	3,322	1.6%	2,940	1.4%	382	13.0%
72	Accommodation and Food Services	15,707	7.6%	15,792	7.6%	-85	-0.5%
81	Other Services(Excpt Public Admin)	6,466	3.1%	6,682	3.2%	-216	-3.2%
92	Public Administration	7,802	3.8%	7,682	3.7%	120	1.6%
99	Unallocated	N/A		115	0.1%		

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

Which Industries pay the best?

In Region 11, the average annual wage per job was $33,341 up 14.7% from $29,091 in 2000. The average annual wage per job was determined by dividing the total aggregate wages paid by the number of jobs. Regional wages per job ranged from $61,693 for the Management of Companies and Enterprises sector, 85.0% greater than the average for the region, to $10,436 for Accommodation and food service sector, 68.7% below the regional average. The average annual wage per job for the top five job producing sectors ranged from $46,033 for Manufacturing, 38.1% above the average for the region, to $10,436 for Accommodation and food services.

Average Annual Wages per Job in Region 11 by Industry Sector for 2000 and 2004

		Average Annual Wage per job					
		2004		2000		Change 2000 to 2004	
NAICS	Industry	Wage	Percent more or less than Total	Wage	Percent more or less than Total	Change in Avg. Wage	Percent Change
	Total	$33,341		$29,061		4,280	14.7%
11	Agriculture, Forestry, Fishing and Hunting	N/A	N/A	$18,400	-36.7%	NA	NA
21	Mining	$57,128	71.3%	$53,047	82.5%	4,081	7.7%
22	Utilities	$61,284	83.8%	$55,248	90.1%	6,036	10.9%
23	Construction	$37,379	12.1%	$33,045	13.7%	4,334	13.1%
31-33	Manufacturing	$46,033	38.1%	$39,430	35.7%	6,603	16.7%
42	Wholesale Trade	$38,825	16.4%	$33,986	16.9%	4,839	14.2%
44-45	Retail Trade	$20,314	-39.1%	$17,563	-39.6%	2,751	15.7%
48-49	Trans. and Warehousing	$34,388	3.1%	$29,040	-0.1%	5,348	18.4%
51	Information	$34,654	3.9%	$29,562	1.7%	5,092	17.2%
52	Finance and Insurance	$38,634	15.9%	$34,460	18.6%	4,174	12.1%
53	Real Estate and Rental and Leasing	$23,515	-29.5%	$21,082	-27.5%	2,433	11.5%
54	Professional, Scientific, and Technical Services	$39,783	19.3%	$34,739	19.5%	5,044	14.5%
55	Mngmnt of Co. and Enterprises	$61,693	85.0%	$51,136	76.0%	10,557	20.6%
56	Waste Mngmnt and Remediation Services	$19,977	-40.1%	$16,736	-42.4%	3,241	19.4%
61	Educational Services	$30,911	-7.3%	$29,548	1.7%	1,363	4.6%
62	Health Care & Social Servs	$34,002	2.0%	$29,623	1.9%	4,379	14.8%
71	Arts, Entrtnmnt, Rec.	$16,922	-49.2%	$16,627	-42.8%	295	1.8%
72	Accom. and Food Servs	$10,436	-68.7%	$9,512	-67.3%	924	9.7%
81	Other Services (Excpt Public Admin)	$21,653	-35.1%	$20,144	-30.7%	1,509	7.5%
92	Public Administration	$29,317	-12.1%	$25,591	-11.9%	3,726	14.6%
99	Unallocated	N/A		$15,257	-47.5%	NA	NA

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

Which Industries Have Been Growing The Fastest In Jobs, Establishments, and Wages?

The sectors with the greatest increase in wage earning jobs from 2000 to 2004 were

- The Management of Companies and Enterprises sector which added 1,065 jobs, a 34.4% increase for the period;
- Mining which added 418 jobs, an increase of 27.1%;
- Arts, Entertainment, and Recreation, which added 382 jobs, an increase of 13.0%, and
- Health Care and Social Services which added 1687 jobs an increase of 6.9%.

Sectors that had the greatest loss of wage earning positions in 2004 were:

- Manufacturing, down 2,138 or 4.5% from 2000;
- Retail Trade, down 1,768 or 6.9% from 2000; and
- Financial, Insurance, Real Estate, Rental and Leasing, down 1,390 or 21,8% from 2000.

An analysis of growth in establishments shows an overall decline in the number of establishments in the region, with Real Estate and Rental and Leasing declining the most on a percentage basis, and Retail Trade declining the most in absolute numbers of establishments. The largest positive growth in establishments on a percentage basis was Management of Companies and Enterprises, with a 27% increase. The largest numerical growth was in Professional, Scientific, and Technical Services, with 56 new establishments.

Total Establishments in Region 11 By Sector, 2000 And 2004

NAICS	Industry	Establishments 2004 Establish-ments	2004 Percent of Total	2000 Establish-ments	2000 Percent of Total	Change 2000 to 2004 Establish-ments	Change 2000 to 2004 Percent of Total
0	Total	10,570		10,784		-214	-2.0%
11	Agriculture, Forestry, Fishing and Hunting	N/A	N/A	134	1.2%	N/A	N/A
21	Mining	80	0.8%	85	0.8%	-5	-5.9%
22	Utilities	57	0.5%	58	0.5%	-1	-1.7%
23	Construction	1,237	11.7%	1,278	11.9%	-41	-3.2%
31-33	Manufacturing	607	5.7%	642	6.0%	-35	-5.5%
42	Wholesale Trade	687	6.5%	669	6.2%	18	2.7%
44-45	Retail Trade	1,594	15.1%	1,701	15.8%	-107	-6.3%
48-49	Transportation and Warehousing	448	4.2%	459	4.3%	-11	-2.4%
51	Information	174	1.6%	164	1.5%	10	6.1%
52	Finance and Insurance	606	5.7%	655	6.1%	-49	-7.5%
53	Real Estate and Rental and Leasing	348	3.3%	384	3.6%	-36	-9.4%
54	Professional, Scientific, and Technical Services	800	7.6%	744	6.9%	56	7.5%
55	Mngmnt of Co. and Enterprises	79	0.7%	62	0.6%	17	27.4%
56	Admin. and Support and Waste Mngmt and Remediation Services	446	4.2%	437	4.1%	9	2.1%
61	Educational Services	193	1.8%	209	1.9%	-16	-7.7%
62	Health Care and Social Services	910	8.6%	904	8.4%	6	0.7%
71	Arts, Entrnmnt, Rec.	129	1.2%	121	1.1%	8	6.6%
72	Accommodation and Food Services	821	7.8%	790	7.3%	31	3.9%
81	Other Services(Except Public Administration)	932	8.8%	999	9.3%	-67	-6.7%
92	Public Administration	273	2.6%	265	2.5%	8	3.0%
99	Unallocated	N/A	N/A	24	0.2%	NA	NA

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

However, if the jobs data is analyzed using a Shift Share approach which takes into consideration national job growth factors as well as industry sector changes that also account for net job changes, we get a clearer picture of regional strengths. Using this Shift Share analysis with 1994 as the base year from which to evaluate changes in the region relative to national and sector trends, the table below shows that for Total Jobs, Region 11 is under-performing as a whole.

Region 11 2004 Shift Share Analysis, Base Year 1994

NAICS	Industry	Jobs				
		2004 Jobs	Job change 1994 to 2004	Nation Job Growth 1994 to 2004	Industry Job Mix 1994 to 2004	Regional Job Shift 1994 to 2004
	Total	206,826	15,770	28,507	-7,192	-5,104
11	Agriculture, Forestry, Fishing and Hunting	N/A	N/A	N/A	N/A	N/A
21	Mining	1,958	31	288	-638	382
22	Utilities	2,726	-248	444	-856	164
23	Construction	11,509	1,706	1,463	2,398	-2,155
31-33	Manufacturing	45,359	1,260	6,580	-13,650	8,330
42	Wholesale Trade	8,320	-106	1,257	-195	-1,168
44-45	Retail Trade	23,999	-94	3,595	-787	-2,901
48-49	Transportation and Warehousing	9,466	1,014	1,261	-282	34
51	Information	3,674	676	447	-114	343
52	Finance and Insurance	4,990	-1,034	899	76	-2,009
53	Real Estate and Rental and Leasing	2,407	-105	375	47	-527
54	Professional, Scientific, and Technical Services	5,674	1,078	686	753	-361
55	Mngmnt of Co. and Enterprises	4,159	2,349	270	-50	2,129
56	Admin. and Support and Waste Mngmt and Remediation Services	7,047	1,800	783	1,331	-314
61	Educational Services	14,827	2,000	1,914	1,424	-1,338
62	Health Care and Social Services	26,301	1,959	3,632	2,002	-3,675
71	Arts, Entrnmnt, Rec.	3,322	1,814	225	332	1,257
72	Accommodation and Food Services	15,707	921	2,206	1,399	-2,685
81	Other Services (Except Public Administration)	6,466	138	944	71	-877
92	Public Administration	7,802	1,019	1,012	-259	266
99	Unallocated	N/A	N/A	N/A	N/A	N/A

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

As shown earlier, there were 206,826 jobs in Region 11 in 2004, an increase of 15,770 from 1994. However, based upon national growth estimates and job sector performance Region 11 should have added approximately 21,315 jobs. National grow rate indicated a growth by 28,507 jobs and the performance of the individual job sectors indicated a 7,192 loss of jobs when combined, predict a 21,315 net job gain for the region.

The Sectors that had the greatest regional job shift share gain from 1994 to 2004 were:

- Manufacturing, adding 1,260 jobs, out-performing expectations based upon national and sector trends by 8,330 jobs;
- Management of Companies and Enterprises, adding 2,349 jobs out-performing expectations by 2,129 jobs; and
- Arts, Entertainment, and Recreation, adding 1,814 jobs out-performing expectations by 1,257 jobs.

Sectors that weakest regional shift share performance were Health Care and Social Service, Retail Trade, and Accommodation and Food Service, which added 1959, lost 94 and gained 921 jobs respectively, under-performing national and sector trends by 3,675, 2,901, and 2,685 jobs respectively.

Which Industries Have the Highest Location Quotient?

To further investigate Region 11 with respect to the other regions locally in Indiana as well as Midwestern and National comparisons we used the Location Quotient, which compares the proportion of population employed in a sector in one region to that of another (ie. Region 11 to the State of Indiana or Nation). The weakness of the Location Quotient is that it does not take into consideration employee productivity. However, as this comparison is across a region of similar technological advancement and access to capital, it is a reasonable measure of regional comparative advantage.

The table below shows the results from a regional Location Quotient analysis. Region 11 has a concentration in Mining, Utilities, Manufacturing, and Management of Companies and Enterprises with 2.35, 2.08, 1.98 and 1.53 times the national average of jobs in those sectors respectively. The sector in Region 11 that had the lowest Location Quotient was the Professional, Scientific and Technical Services sector with only 52 percent of the expected jobs in the sector base upon region population. In the Health Care and Social Services Sector, Region 11 was consistent with the Nation average of jobs in the sector based upon population. Given Health Care, in general, is a population based service Region 11 is in line with expectations.

Region 11 Location Quotient Analysis Of 2004 Jobs By Sector.

NAICS	Industry	Jobs			
		2004 Jobs	2004 LQ (IN base)	2004 LQ (Midwest base)	2004 LQ (US base)
	Total	206,826	1	1	1
11	Agriculture, Forestry, Fishing and Hunting	N/A	N/A	N/A	N/A
21	Mining	1,958	4.05	3.7	2.35
22	Utilities	2,726	2.59	2.68	2.08
23	Construction	11,509	1.07	1.17	1.01
31-33	Manufacturing	45,359	1.09	1.39	1.98
42	Wholesale Trade	8,320	0.96	0.89	0.92
44-45	Retail Trade	23,999	0.99	1	0.99
48-49	Transportation and Warehousing	9,466	1.06	1.1	1.15
51	Information	3,674	1.06	0.92	0.71
52	Finance and Insurance	4,990	0.67	0.55	0.53
53	Real Estate and Rental and Leasing	2,407	0.92	0.9	0.71
54	Professional, Scientific, and Technical Services	5,674	0.88	0.58	0.52
55	Mngmnt of Co. and Enterprises	4,159	2.13	1.48	1.53
56	Admin. and Support and Waste Mngmt and Remediation Services	7,047	0.64	0.58	0.56
61	Educational Services	14,827	0.87	0.84	0.81
62	Health Care and Social Services	26,301	1.07	1.05	1.04
71	Arts, Entrnmnt, Rec.	3,322	1.01	1.1	0.93
72	Accommodation and Food Services	15,707	0.94	0.96	0.92
81	Other Services(Except Public Administration)	6,466	1.07	1	0.93
92	Public Administration	7,802	0.83	0.83	0.68
99	Unallocated	N/A	N/A	N/A	N/A

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

These analyses indicate the Region 11's strengths are in the following sectors: 1) Manufacturing, 2) Management of Companies and Enterprises, 3) Arts Entertainment, and Recreation, 4) Mining, 5) Utilities and 6) Health Care Services as shown below.

Top Four Business Sectors in Selected Areas Of Measure For Region 11

Rank	LQ 2004	Shift Share 1994-2004	Job Growth 2000-2004	Average Wage per job 2004	Total Jobs 2004
1	Mining	Manufacturing	Management Co. & Ent.	Management Co. & Ent.	Manufacturing
2	Utilities	Management Co. & Ent.	Mining	Utilities	Health Care and Social Serv.
3	Manufacturing	Arts, Entertain. & Recreation	Arts, Entertain. & Recreation	Mining	Retail Trade
4	Management Co. & Ent.	Mining	Health Care and Social Serv.	Manufacturing	Accommodation and Food Serv.

What are the Most Important SubSectors?

With the analysis of the Sectors having identified regional strengths to further investigate, the following analysis uses a similar approach to identify subsectors in Region 11 that represent areas with the most potential for job growth with high wages that are appropriate for targeting by the workforce system. Two critical attributes to the next phase of analysis are high wages positions that are appropriate for targeting by the work force system.

While six sectors were identified by the sector analysis, this analysis will focus on four of the sectors identified: Manufacturing, Mining, Utilities, and Health Care Services. Management of Companies and Enterprises and Arts, Entertainment, and Recreation will be dropped from further consideration for the following reasons:

- In the Arts & Entertainment sector, the recent development of Riverboat Casinos and the development of Aztar's Riverboat Casino in Evansville has resulted in significant growth in the region's Amusement, Gambling, and Recreation Industries Subsector (713). However the average annual wage per job for Subsector 713 in 2004 was $17,202, only about half of the regional average of $33,341. Food preparation, Grounds keeping, and Administrative support accounted for approximately 50% of the jobs in this subsector. As a result of the low skill requirements and low wages, Subsector 713 was eliminated from further analysis.
- Subsector 551 Management of Companies and Enterprises was eliminated from further consideration due to 35% of the jobs being administrative support positions with wages averaging less than $30,000 annually per job. While almost 40% of the positions were Management, Finance, Business, and Computer operations specialists that average over $50,000 annually per job, these high skilled positions typically have a four-year degree requirement and have recruitment requirements that limit the ability for the workforce system to target these positions.

The remaining four sectors were identified by Lead Team and Consortium members as sectors of regional interest. These sectors will be divided down into subsectors for further analysis.

- In the Mining Sector (21), Subsector (212) Mining (except oil and gas) has regional interest due to significant Mining activities in the Northern part of the region. This subsector accounted for 1,766 of the 1,958 jobs in the sector in 2004.
- The Utilities Sector (22) is not subdivided, however the Utilities subsector is labeled Subsector (221) Utilities. Subsector (221) has 2,726 jobs with an average annual wage per job of $61,284 in 2004.
- The Manufacturing Sector (31-33) is subdivided into 21 subsectors as shown below.

Total Number of Manufacturing Jobs And Average Annual Wages Per Job By Subsector, 2004

NAICS Subsector	Industry	2004		
		Establishments	Jobs	Average Wage Per Job
	Manufacturing	607	45,359	$46,033
311	Food Manufacturing	43	2,569	$32,439
312	Beverage and Tobacco Product Manufacturing	3	260	$31,825
313	Textile Mills	N/A	N/A	N/A
314	Textile Product Mills	N/A	N/A	N/A
315	Apparel Manufacturing	3	5	$9,124
316	Leather and Allied Product Manufacturing	N/A	N/A	N/A
321	Wood Product Manufacturing	53	1,102	$27,745
322	Paper Manufacturing	14	1,017	$44,274
323	Printing and Related Support Activities	48	693	$30,827
324	Petroleum and Coal Products Manufacturing	6	519	$60,021
325	Chemical Manufacturing	27	4,472	$72,209
326	Plastics and Rubber Products Manufacturing	47	5,133	$35,416
327	Nonmetallic Mineral Product Manufacturing	33	1,556	$41,892
331	Primary Metal Manufacturing	10	3,670	$62,972
332	Fabricated Metal Product Manufacturing	85	2,095	$34,453
333	Machinery Manufacturing	61	1,190	$43,610
334	Computer and Electronic Product Manufacturing	12	1,106	$36,647
335	Electrical Equipment, Appliance, and Component Manufacturing	10	3,320	$47,847
336	Transportation Equipment Manufacturing	25	7,186	$58,624
337	Furniture and Related Product Manufacturing	72	8,187	$34,171
339	Miscellaneous Manufacturing	40	583	$37,065

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

The subsectors vary significantly in number of jobs, from five workers in Apparel manufacturing to 8,187 in Furniture manufacturing. They vary in average annual wage per job, from $9,124 in Apparel manufacturing to $72,209 in Chemical Manufacturing.

Research into the individual subsectors focused upon growth of the subsector and the subsector's potential relationship to the manufacturing cluster in the region. As we are trying to identify high wage jobs, subsectors were eliminated that had relatively small regional impact and/or low average wages per job (Beverage and Tobacco Product Manufacturing (312), Textile Mills (313), Textile Product Mills (314), Apparel Manufacturing (315), Leather and Applied Products (316), Wood Product Manufacturing (321), and Print and Related Support Activities (323)).

In addition, while subsectors such as Paper Manufacturing (322), Petroleum and Coal Products Manufacturing (324), Computer and Electronic Product Manufacturing (334), and Miscellaneous Manufacturing (339) had high average wages per job, they produced relatively few jobs in the region. The final subsector eliminated was Food Manufacturing (311). This subsector had average wages just below the average for the region and contained over 2500 jobs in 2004, however its is not a part of the

Transportation Manufacturing Cluster that has been developing in the region nor does it have a significant size impact on the region, as in the case of Furniture Manufacturing with 8,187 jobs in the region.

The Manufacturing subsectors with the most jobs in 2004 were:

- Furniture and Related Product Manufacturing (337)
- Transportation Equipment Manufacturing (336),
- Plastics and Rubber Product Manufacturing (326), and
- Chemical Manufacturing (325).

These four subsectors accounted for 24,978 jobs, 55% of all jobs in the manufacturing sector.

The Transportation Equipment Manufacturing has experienced an 84.8% increase in wage earning jobs between 2000 and 2004, Table 8. The next greatest growth subsector was Plastic and Rubber Product Manufacturing with a 4.0% increase in wage earning job over the same period. The only other subsector to out perform the average for Region 11, a net loss of 0.8% of wage earning jobs, was Nonmetallic Mineral Product Manufacturing (327), which was down 0.1% from 2000 to 2004. Transportation Equipment Manufacturing also experienced a 30.8% increase in average annual wage per job over the 2000 to 2004 period. The Sector's other top performing subsectors were Chemical Manufacturing (325) and Furniture and Related Product Manufacturing (337) with 17.1% and 13.7% increases, respectively.

As a whole, Region 11 saw a 14.7% increase in average annual wages per job across all industry sectors, Table 8. The list of Manufacturing subsectors that will be further investigated to identify critical occupations and critical skill shortages is shown below.

Job and Average Annual Wage Per Job Growth For Selected Manufacturing Subsectors, 2000 To 2004

		Job		Avg Annual Wage	
NAICS	Manufacturing Subsector	2004	Change 2000-2004	2004	Change 2000-2004
	Region 11 Total All Sectors	206,826	-0.80%	$33,341	14.70%
325	Chemical Manufacturing	4,472	-15.90%	$72,209	17.10%
326	Plastics and Rubber Products Manufacturing	5,133	4.00%	$35,416	11.90%
327	Nonmetallic Mineral Product Manufacturing	1,556	-0.10%	$41,892	4.50%
331	Primary Metal Manufacturing	3,670	-10.20%	$62,972	4.70%
332	Fabricated Metal Product Manufacturing	2,095	-25.10%	$34,453	5.10%
333	Machinery Manufacturing	1,190	-31.10%	$43,610	12.50%
335	Elect. Equip., Appl., & Comp. Manuf.	3,320	-9.80%	$47,847	12.40%
336	Transportation Equipment Manufacturing	7,186	84.80%	$58,624	30.80%
337	Furniture and Related Product Manufacturing	8,187	-16.20%	$34,171	13.70%

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

The selection of these subsectors was based upon their impact on the region with respect to jobs, average annual wages and the subsector's relationship with other subsectors in the region. For example, Primary Metal Manufacturing (331), Fabricated Metal Manufacturing (332), Machinery Manufacturing (333), Electrical Equipment Manufacturing (335) and Nonmetallic Mineral Product Manufacturing (327) are components of the Transportation Equipment Manufacturing Cluster. The other subsectors, Chemical Manufacturing (325), Plastics and Rubber Manufacturing (326), and Furniture and Related Product Manufacturing (337) are significant to the region in themselves and in some cases also overlap with the developing Transportation Manufacturing Cluster such as Red Spot, a paint company, which sells many products to Transportation Equipment Manufactures.

The Health Care and Social Services Sector is divided into four subsectors shown in Table 9. Two of the four subsectors Ambulatory Health Care Services (621) and Hopitals (622) will be investigated further. These subsectors meet the criteria of High average annual wage positions, $44,765 for Ambulatory Health Care Services and $34,641 for Hospitals, with 8,153 and 10,633 jobs in 2004 respectively, Table 9. The other two subsectors did not have average annual wages above the regional average.

Total Number of Health Care And Social Services Sector Jobs And Average Annual Wages Per Job By Subsector, In 2004

NAICS Subsector	Industry	Jobs		Average Wage Per Job	
		2004	Change 2000 to 2004	2004	Change 2000 to 2004
621	Ambulatory Health Care Services	8,153	15.2%	$44,765	8.8%
623	Nursing and Residential Care Facilities	4,809	-5.3%	$23,606	16.9%
622	Hospitals	10,633	5.0%	$34,641	18.1%
624	Social Assistance	2,706	15.9%	$17,532	6.3%

Data sources: Indiana Business Research Center based on ES202 data, U.S. Bureau of Labor Statistics
Provided by: Indiana Business Research Center, IU Kelley School of Business

Which Industries Have Been Targeted By State And/Or Local Economic Development Experts For Future Growth?

The Transportation Equipment sector continues to be a focus of economic development in the region as Toyota continues to draw Parts and Equipment suppliers to develop production capacity in the region (Motor and Equipment Manufacturers Association – "Transplant Suppliers Surge in North America.")

Which Occupations are Most Appropriate for Targeting?

Research to identify critical skill shortages and occupations primarily consisted of telephone interviews with Region 11 businesses members, regional economic development experts and Academic institutions as well as discussion with focus group participants. A contact list of regional businesses was developed using InfoUSA website linked to DWD SSI Website. Contact information for companies from each of the selected subsectors was collected from website database as well as personal knowledge and contacts of the research team. A list of approximately 175 possible contacts was generated. The research team conducted telephone interviews using interview questions. These questions were also faxed to several businesses in an attempt to research businesses that did not respond to the telephone interview process. The research team made contact with 120 of the targeted contacts and were able to obtain responses from 60 of those contacts. The interview list is contained later in the appendices.

Manufacturing, Mining, Utilities

There were 41 responses from telephone interviews of industrial organizations in the Manufacturing, Utility and Mining Sectors. While all respondents indicated that the region was generally well suited for hourly production occupations, 28 of the 41 (68%), reported that in the entry level unskilled or semi-skilled positions a significant proportion of the applicants lacked basic math, and problem solving skills as well as a good work ethic such as showing up to work. Several of those interviewed also indicated that drug screening reduced the number of applicants for these positions. Respondents also indicated that Senior Administration or Technical positions, such as Engineers, Scientists, or Management specialists were at times difficult to attract, requiring increased monetary incentives. Unlike the hourly positions, which were usually filled locally, these positions were filled through Midwestern or National searches. However the consensus among the interviewed Human Resource Managers/Directors was that there would likely always be a significant pool of job applicants with Baccalaureate degrees that desired to relocate back to Southwestern Indiana therefore finding qualified people for these positions was not a significant concern.

The skill set/occupation that seemed to be in most demand was that of the Industrial Maintenance and Industrial Trades such as Electrician, Pipe fitter, Hydraulics, and Mechanical in the maintenance field. Twenty-two or 54% of those interviewed indicated that Maintenance and Technical positions were difficult to fill. This finding was further supported by comments from Regional Post Secondary Education Institutions such as Vincennes University and IVY Tech Community College. Both have experienced an increased demand for training services as well as an increase in grant funding opportunities to develop training program in the region as well as across the State. Larger organizations such as Cinergy or Toyota, typically had the least difficultly filling these positions because they could offer higher wages and job security. At times, unionization limited the organizations ability to attract qualified applicants because of wage considerations across all trades at that organization. Several local businesses, 35 or 85% of those interviewed, had developed or were in the process of developing programs to increase the training options available so that they may increase the future supply of qualified applicants. One option was to fund scholarship programs in these areas (Toyota). Another was to develop in-house apprenticeship programs to provide the needed skills and experiences (General Electric). A third option was a combination of formal schooling in targeted programs at regional vocational schools coupled with mentoring at work and vendor sponsored training programs (Rexam).

Findings from telephone interviews also indicated that these Industrial Maintenance-Technician/Industrial Trade skill sets easily transfer across the industrial sector. For example an Industrial Electrician with experience in manufacturing or power generation would be able to move to the other sector if a more desirable position was available. In fact, that was the norm in the region in the late 1990's as Toyota ramped up hiring to meet production and maintenance staffing requirements for it facility in Gibson County. Toyota's higher wages attracted applicants from across the Midwest from all industry sectors (Wall Street Journal, 1999). The effect of hiring experienced workers away from their existing positions had a "domino effect" down the "food chain" of organizations. The organizations with the more desirable positions due to high wages, benefits, job security or advancement potential are able attract the more experienced workers from their existing position causing those organizations to hire workers away from organization that are not able to meet the higher wages or better benefits being offered. The increased wage and benefit pressure forces smaller organizations as well as those in more price sensitive markets to settle for less experienced workers and higher turnover. Several of those interviewed were concerned about an increasing number of applicants with a history of "job-hopping".

The lack of locally available qualified applicants in these Industrial Maintenance Industrial Technician positions will limit future development of the Transportation Equipment Manufacturing cluster that has been developing in the region since the mid 1990's. Toyota remains at the center of this cluster and the region continues to attract suppliers of Toyota production such as ATTC in Perry County. Region 11 has a geographic advantage in attracting new enterprises that support the Transportation Manufacturing Cluster, however, if the trend of fewer people qualified in the field of Industrial Maintenance the region will find it increasing difficult to attract these suppliers in the future which will limit future expansion and economic growth of the region.

Health Care

There were eight interviews conducted in the Hospital and Ambulatory care subsectors, four in each. In addition, three interviews were conducted with faculty in Health Care departments of regional post-secondary institutions. In the Hospital subsector, Pharmacists, Occupational Therapists, Physical Therapists, Respiratory Therapists, Nurses, and Medical Imaging Technicians were all mentioned as difficult to fill positions. The most difficult being Pharmacists, Occupational Therapists and Physical Therapists in part because these occupations now require Master or Doctorial level training and while some of the regional health care facilities offer internship/externship programs for students in these fields, there are no Degree granting institutions in the region. The Pharmacists, for example, are mainly recruited from Butler, Purdue, Ohio State, University of Chicago and University of St. Louis. An addition reason for the difficulty in filling positions for these occupations is that they are in demand across the county. New Pharmacists and Therapists have many options upon graduation and are not likely to be drawn to EGR 11 unless they have a family tie to the region. The relatively small number of staff in these positions compounds the effects of vacancies in these positions as it strains existing staff to cover additional hours. Although some operational changes have been made such as increasing the number of Pharmacist's assistants per Pharmacist form 2:1 to 4:1 as a means to ease the burden on the existing Pharmacists. None of those interviewed could identify any solutions to the current shortage other than increasing the output from the Degree granting institutions.

Medical Imaging Technicians were also mentioned as an in-demand occupation. However, they were not in as short supply as Pharmacist and Therapists. There are four institutions in EGR 11 that offer training in these fields: University of Evansville (UE), University of Southern Indiana (USI), Vincennes University (VU) and IVY Tech Community College. As a result of the local supply of Medical Imaging Technicians, the consensus among those interviewed was that people for these positions were not in short supply but that the hiring difficulties arose from the cycle of availability based upon the school year.

The availability of Nurses was a concern to those in the Hospital setting more than those in Ambulatory Care. All four interviewed from hospitals indicated that the shift nature of Hospital work was less attractive to the current generation of Nursing applicants than a 8 to 5 schedule of a Clinic or Physician's office. The region's Hospitals have an increasing demand for Registered Nurses (RN). Currently there are two and four year programs available, however the employment market provides very little compensation differential between the two. It was also mentioned that there is a trend toward the Baccalaureate level of training for the Hospital Nursing staff. In EGR 11 one of the Nursing Programs, USI, has closed its two-year RN program with the last class graduating in 2007. After 2007, USI and UE will have only Baccalaureate Nursing programs. That will leave Vincennes University and Ivy Tech with two-year RN programs. The table below shows the regions estimated annual RN graduation totals.

The shortage of RNs in the hospitals has an effect on the quality of care that a hospital is able to provide. Without adequate staffing levels there is an increased risk of error by the Nurses as they cover a greater number of patients and work longer hours. The increased stress on these Nurses also increases burnout and turnover among the nursing staff. In addition, the Nursing population is aging and is expected to experience a significant number of retirements as the Baby Boom generation begins retiring in the next few years. Therefore, it is vital to the quality of health care in the region which effects quality of life in the region, which also effects recruitment into the region and thus economic development that actions be taken to the enhance the regions ability to train, recruit, and retain quality Nursing professionals.

Selected Occupation Employment Totals For Selected Subsectors, 2002 Data

	Hospitals	Ambulatory care	Nursing Homes
Registered Nurse (29-1111)	2,400	1,110	340
Licensed Practical Nurse (29-2061)	510	460	610

Bureau Labor Statistics; Indiana Department of Workforce Development

Annual Graduation Totals For EGR 11 Nursing Programs, 2005

	RN	LPN
University Southern Indiana	50(B.S.)/50(Assoc.)*	0
University of Evansville	20	0
Vincennes University	80	45
IVY Tech Community College	50	30

* USI Associated Degree RN program ends with Class of 2007

Licensed Practical Nursing (LPN) are also a significant component of the regions nursing staff. These nurses typically work in long-term care facilities, Physician offices or medical clinics. While, these facilities require a nursing staff, those interviewed indicated that RNs were usually over qualified for these roles. In EGR 11, there are two LPN programs: Vincennes University and IVY Tech Community College. These programs graduate approximately 45 and 30 LPNs annually. Licensed practical nurses also provide and important role as an intermediate point for transition into nursing careers. People interested in nursing are able complete an LPN program in one to two years. Once an LPN, they are able continue their training to become an RN at either the Associates level or Bachelors level. The LPN along with the RN are the an integral component of the region’s health care system and essential for the development of a quality health care system which is vital to the well-being of EGR 11. While there were several occupations that were difficult for organizations in the Hospital and Ambulatory Care subsectors to recruit in EGR 11, the Nursing fields offered the greatest potential for return in workforce development efforts as there are over 4000 RN positions in the region and 1650 LPN positions.

Who Was Contacted to Obtain Skill Shortage Input?*

Mining Subsector Contact List

Black Beauty Coal CO
Coal Mining & Shipping (212111)
PO Box 312 Evansville IN 47702
812-423-6000

Traid Mining
Coal Mining & Shipping (212111)
RR 1 Box 29A Lyons IN 47443
270-683-4186

United Minerals Inc
Mining Companies (212399)
409 N Van Buren St Huntingburg, IN 47542
812-683-5024

Gibson County Coal, LLC
P.O. Box 1269
Route 3, Lyle Station Road
Princeton, IN 47670
812-385-1816

Solar Sources Inc
PO Box 47068 Indianapolis IN 46247
317-788-0084

Five Star Mining Inc
6594 W St Rd 56 Petersburg IN 47567
812-464-4732

Indiana Coal Council
150 West Market St, Indianapolis, IN 46204
317-638-6997

Plastic and Rubber Manufacturing Subsector Contact List

Berry Plastics Corp
Plastics & Plastic Products (Mfrs) (326199)
101 Oakley S Evansville, IN 47710
812-424-2904

Marx Mold & Tool Inc
Plastics-Mold-Manufacturers (326199)
7599 Saint John Rd Elberfeld, IN 47613
812-983-4660

Utilities Subsector Contact List

American Electric Power CO
Electric Companies(221122)
2791 N US Highway 231 Rockport, IN 47635
812-649-9171

EMC Vincennes Waste Water
Water & Sewage Companies-Utility (221310)
301 Perdue Rd Vincennes, IN 47591
812-886-5011

Indianapolis Power & Light CO
Electric Companies (221122)
6925 N State Road 57 Petersburg, IN 47567
812-354-8801

Patoka Regional Water District
Water & Sewage Companies-Utility (221310)
2647 N State Road 545 Dubois, IN 47527
812-678-5781

PSI Energy Generating Station
Electric Companies (221122)
3001 W Broadway S Princeton, IN 47670
812-386-8491

Vectren Energy Delivery
Electric Companies (221122)
Evansville, IN 47710
812-464-4500

Vincennes Water Dept
Water & Sewage Companies-Utility (221310)
403 Busseron St Vincennes, IN 47591
812-882-7877

Nonmetallic Manufacturing Contact List

Can-Clay Corp
Structural Clay Products Nec (Mfrs) (327123)
402 Washington St Cannelton, IN 47520
812-547-3461

Gemtron
Glass-Manufacturers (327211)
2000 Chestnut St Vincennes, IN 47591
812-882-2680

Plastic and Rubber Manufacturing Subsector Contact List (cont'd) **Mid States Rubber Products Inc** **Molded Extruded/Lathe Cut Rbbr Gds (Mfr) (326291)** **1230 S Race St Princeton, IN 47670** **812-385-3473** **Rexam Closures & Containers** **Plastics-Mold-Manufacturers (326199)** **3245 Kansas Rd Evansville, IN 47725** **812-867-6671**	**Nonmetallic Manufacturing Contact List (cont'd)** **Irving Materials Inc Concrete** **Ready-Mixed Concrete-Manufacturers (327320)** **1816 W Lloyd Expy Evansville, IN 47712** **812-424-3554** **M & W Concrete Pipe & Supply** **Concrete Prods-Ex Block & Brick (Mfrs) (327390)** **1213 Stanley Ave Evansville, IN 47711** **812-426-2871** **PPG Industries Inc** **Glass-Manufacturers (327211)** **424 E Inglefield Rd Evansville, IN 47725** **812- 867-6601**
Primary Metal Manufacturing Contact List **Alcoa Warrick Operations** **Aluminum Sheet Plate & Foil (Mfrs) (331315)** **Highway 66 & Highway 61 Newburgh, IN 47630** **812-853-4155** **Bwx Technology Inc** **Steel Works/Blast Furnaces/Rolling Mls (331111)** **1400 Old Highway 69 S Mount Vernon, IN 47620** **812-838-1200** **Grandview Aluminum Products** **Foundries-Aluminum Brass Bronze & Etc (331524)** **110 W 4th St Grandview, IN 47615** **8126492569** **Waupaca Foundry Inc** **Foundries-Steel (331513)** **9856 W State Road 66 Tell City, IN 47586** **812-547-1580**	**Electronic Equip., Component, Appliance Manufacturing Contact List** Flanders Electric Motor Svc Electric Motors-Controls-Manufacturers(335314) 10334 Hedden Rd Evansville, IN 47725 812-867-4014 Hansen Corp Motor & Generator-Manufacturers(335312) 901 S 1st St Princeton, IN 47670 812-385-3000 Hurst Manufacturing Corp Motor & Generator-Manufacturers(335312) 1551 E Broadway St Princeton, IN 47670 812-385-2564 **Whirlpool Corp** **Refrigerators-Manufacturers (335222)** **5401 Highway 41 N Evansville, IN** **812-426-4000**
Chemical Manufacturing Contact List Adco Products Inc Adhesives & Sealants (Manufacturers)(325520) 1175 E Diamond Ave Evansville, IN 47711 812-464-2488 Bristol-Myers Squibb CO Pharmaceutical Preparation(325412) 2400 W Lloyd Expy Evansville, IN 47721 812-429-7800	**Ambulatory Healthcare Contact List** Advanced Diagnostic Imaging Physicians & Surgeons(621111) 1120 Professional Blvd Evansville, IN 47714 812-471-7086 Advanced Pain Care Clinic Physicians & Surgeons(621111) 4100 Covert Ave Evansville, IN 47714 812-477-7246

Chemical Manufacturing Contact List (cont'd)	Ambulatory Healthcare Contact List (cont'd)
Bondline Adhesives Inc **Adhesives & Sealants (Manufacturers) (325520)** **500 N Woods Ave Evansville, IN 47712** **812 423 4651** Comtech Plastics Inc Custom Compounding-Purchased Resin (Mfr)(325991) 9 N Kentucky Ave Evansville, IN 47711 812-423-8270 Dsm Engineering Plastics Plastics-Raw Mtrls/Powder/Resin-Mfrs(325211) 2267 W Mill Rd Evansville, IN 47720 812-435-7500 Hoehn Plastics Plastics-Raw Mtrls/Powder/Resin-Mfrs(325211) County Rd 925 St Poseyville, IN 47633 812-874-3646 Jasper Chemical Coatings Lacquers-Manufacturers(325510) 1014 Vine St Jasper, IN 47546 812-482-2863 Jasper Rubber Products Inc Rubber-Synthetic (Manufacturers)(325212) 1010 1st Ave W Jasper, IN 47546 812-482-3242 **Lucent Polymers Inc** **Plastics-Raw Mtrls/Powder/Resin-Mfrs (325211)** **1800 Lynch Rd Evansville, IN 47711** **812-421-2216** Matrixx Group Inc Resins-Manufacturers(325211) 15000 Highway 41 N Evansville, IN 47725 812-421-3600 Mead Johnson Nutritionals Drug Millers(325412) 2404 W Lloyd Expy # R4 Evansville, IN 47712 812-429-7956 Multiseal Inc Adhesives & Sealants (Manufacturers)(325520) 4320 Hitch Peters Rd Evansville, IN 47711 812-428-3422	Advanced Vision Assoc Physicians & Surgeons(621111) 4405 Bellemeade Ave # 101 Evansville, IN 47714 812-474-1010 Almost Family Nurses & Nurses' Registries(621399) 1015 Professional Blvd Evansville, IN 47714 812-471-4100 American Portable Medical Svc X-Ray Laboratories-Medical(621511) 2104 Division St Evansville, IN 47711 812-469-3740 Bellemeade Family Physicians Physicians & Surgeons(621111) 3801 Bellemeade Ave # 200B Evansville, IN 47714 812-485-3737 **Brinks Family Practice** **Physicians & Surgeons(621111)** **410 N Main St Princeton, IN 47670** **812-386-7522** **Cardiovascular Consultants** **Physicians & Surgeons(621111)** **514 S 9th St Vincennes, IN 47591** **812-885-8020** **Center For Women's Health** **Physicians & Surgeons(621111) 613 Dorbett St Jasper, IN 47546** **812-481-2224** Chancellor Center For Oncology Physicians & Surgeons(621111) 4055 Gateway Blvd # 110 Newburgh, IN 47630 812-858-2273 Dialysis Affiliates Clinics(621493) 1312 Professional Blvd Evansville, IN 47714 812-491-6300 Evansville Audiological Svc Audiologists(621340) 1020 Professional Blvd Evansville, IN 47714 812-473-6093

Chemical Manufacturing Contact List (cont'd)

Ohio Valley Plastics Inc
Plastics-Raw Mtrls/Powder/Resin-Mfrs(325211)
4825 N Spring St Evansville, IN 47711
812-425-8544

Omni Plastics
Plastics-Raw Mtrls/Powder/Resin-Mfrs(325211)
515 W Tennessee St Evansville, IN 47710
812-421-8900

Quality Coatings Inc
Paint-Manufacturers(325510)
1700 N State St Chandler, IN 47610
812-925-3314

Red Spot Paint & Varnish CO
Paint Varnish & Allied Products (Mfrs)(325510)
1107 E Louisiana St Evansville, IN 47711
812-428-9100

Uniseal Inc
Adhesives & Sealants (Manufacturers)(325520)
1014 Uhlhorn St Evansville, IN 47710
812-463-5231

Fabricated Metal Product Manufacturing Contact List

Superior Essex
Fabricated Wire Products-Misc (Mfrs) (332618)
1299 E Essex Rd Vincennes, IN 47591
812-882-8108

Transportation Manufacturing Contact List

Accuride Corp
Automobile Parts & Supplies-Mfrs (336399)
7140 Office Cir Evansville, IN 47715
812-962-5000

Toyota Motor Manufacturing CO
Truck-Manufacturers (336120)
4000 Tulip Tree Dr Princeton, IN 47670
812-387-2000

Ambulatory Healthcare Contact List (cont'd)

Evansville Primary Care
Physicians & Surgeons(621111)
989 S Kenmore Dr # A Evansville, IN 47714
812-479-6907

Evansville Radiology
Physicians & Surgeons(621111)
611 Harriet St # 201 Evansville, IN 47710
812-422-3254

Evansville Surgery Ctr
Clinics(621493)
4133 Gateway Blvd # 100 Newburgh, IN 47630
812-858-4400

Eye Group
Physicians & Surgeons(621111)
1020 W Buena Vista Rd Evansville, IN 47710
812-423-3131

Heart Group
Physicians & Surgeons(621111)
415 W Columbia St Evansville, IN 47710
812-464-9133

Ireland & Luzio Behavioral Svc
Psychologists(621399)
3101 N Green River Rd # 910 Evansville, IN 47715
812-479-1916

Ohio Valley Dialysis
Clinics(621493)
230 Bellemeade Ave Evansville, IN 47713
812-425-4111

Tri Cap Family Health Svc
Clinics(621493)
499 W State Route 62 Boonville, IN 47601
812-897-5918

Indiana Pain Academy
Physicians & Surgeons(621111)
2828 Mount Vernon Ave Evansville, IN 47712
812-424-0871

Zlb Plasma Svc
Blood Banks & Centers(621991)
1000 Chestnut St Evansville, IN 47713
812-423-5418

Furniture Manufacturing Contact List	Ambulatory Healthcare Contact List (cont'd)
Best Chairs Inc **Furniture-Manufacturers (337127)** **1 Best Dr Ferdinand, IN 47532** **812 367 0100** **Counter Design CO** **Counter Tops (337110)** **2381 N Cullen Ave Evansville, IN 47715** **812-477-1243** **Dmi Furniture Inc** **Wood-Office Furniture (Manufacturers) (337211)** **611 E 8th St Huntingburg, IN 47542** **812-683-2626** **Flexcel Inc.** **Wood-Office Furniture (Manufacturers) (337211)** **1037 E 15th St. Jasper, IN 47546** **812-482-2513** **Heritage Hills** **Office Furniture & Equip-Mfrs(337214)** **1299 W State Road 162 Santa Claus, IN 47579** **812-937-4585** **Jofco Intl** **Office Furniture & Equip-Mfrs (337214)** **402 E 13th St Jasper, IN 47546** **812-482-5154** **Karges Furniture CO** **Furniture-Manufacturers (337127)** **1501 W Maryland St Evansville, IN 47710** **812-425-2291** **U B Klem Furniture CO Inc** **Furniture-Manufacturers (337127)** **3861 E Schnellville Rd Saint Anthony, IN 47575** **812-326-2236** **Woodmaster Inc** **Furniture-Manufacturers (337127)** **5170 S 3rd St Saint Anthony, IN 47575** **812-326-2626** Indiana Furniture Industries Wood-Office Furniture (Manufacturers)(337211) 1224 Mill St Jasper, IN 47546 812-482-5727	Visiting Nurse Assn Home Health Service(621610) 610 E Walnut St Evansville, IN 47713 812-425-0853 Reo Family Practice Ctr Physicians & Surgeons(621111) 3434 W State Road 66 Rockport, IN 47635 812-649-5348 **Wabash Valley Eye Ctr** **Physicians & Surgeons(621111)** **2020 Clearview Dr Vincennes, IN 47591** **812-882-9600** **Welborn Clinic** **Physicians & Surgeons (621111)** **3700 Washington Ave Evansville, IN 47714** **812-426-9450** **Hospital Subsector Contact List** **Deaconess Hospital Inc** **Hospitals(622110)** **600 Mary St Evansville, IN 47747** **8124503327** **Gibson General Hospital** **Hospitals(622110)** **1808 Sherman Dr Princeton, IN 47670** **8123853401** **Good Samaritan Hospital** **Hospitals(622110)** **520 S 7th St Vincennes, IN 47591** **8128825220** Memorial Hospital & Health Ctr Hospitals(622110) 800 W 9th St Jasper, IN 47546 812-482-2345 **Perry County Memorial Hospital** **Hospitals(622110)** **1 Hospital Rd Tell City, IN 47586** St Joseph's Hospital Hospitals(622110) 1900 Medical Arts Dr Huntingburg, IN 47542 812-683-2121

Furniture Manufacturing (cont'd)	Hospital Subsector Contact List (cont'd)
Inwood Office Furniture Inc Wood-Office Furniture (Manufacturers)(337211) 1108 E 15th St Jasper, IN 47546 812-482-6121 Kimball International Inc Furniture-Manufacturers(337127) 1600 Royal St Jasper, IN 47549 812-482-1600 Masterbrand Cabinets Cabinets-Manufacturers(337110) 1491 Meridian Rd Jasper, IN 47546 812-482-2513 Styline Industries Inc Wood-Office Furniture (Manufacturers)(337211) 4611 S 400W Huntingburg, IN 47542 812-683-7174	**St Mary's Health System Hospitals(622110) 3700 Washington Ave Evansville, IN 47750 812-485-4000** **Training Program Contacts** **Career, Technology and Adult Education, Evansville-Vanderburgh School Corp. 726 Wedeking Ave., Evansville, IN 47711 812-435-8280 Training Program Contacts, cont'd** **Industrial Apprenticeship Technology program Ivy Tech Community College of Southwest Indiana 3501 First Avenue Evansville, IN 47710 812-426-2865** **Joint Apprenticeship and Training Committee Serving Southwestern Indiana 1321 Edgar Street, Evansville, IN 47710 812-422-3343** **Statewide Business & Industry Training Vincennes University 1002 N First Street Vincennes, IN 47591 812-888-5150** **Health Sciences Division Ivy Tech Community College of Southwest Indiana 3501 First Avenue Evansville, IN 47710 812-426-2865 IVY Tech** **University of Southern Indiana College of Nursing and Health Professions 8600 University Boulevard Evansville, IN 47712 (812) 464-8600**

* Contacts in bold responded to Interview questions.

How Were Shortages Determined (Demand, Supply, Net Shortage?)

Demand Side Worksheet

EGR Name:	ERG 11
Occupation Name:	Industrial Machine Maintenance
Occupation SOC:	49-9041

1. Estimated Job vacancies, end of 2005

Lower estimate	1
Middle estimate	3
Upper estimate	7

2. Projected number of job openings annually due to growth and net replacements:

Year	2006	2007	2008	2009	2010	2011	2012
A. Lower projection:							
Total, all industries in EGR	8	8	8	9	9	9	9
Manufacturing (33)	8	8	8	9	9	9	9
etc.							
B. Middle projection:							
Total, all industries in EGR	17	18	18	19	20	21	22
Manufacturing (33)	17	18	18	19	20	21	22
etc.							
C. Upper projection:							
Total, all industries in EGR	27	29	31	32	34	36	39
Manufacturing (33)	27	29	31	32	34	36	39
etc.							

Notes:

This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Supply Side Worksheet #1 ("Production")

EGR Name:	EGR 11						
Occupation Name:	Industrial Machine Maintenance						
Occupation SOC:	49-9041						
Projected "production" of new entrants into this occupation, by year							
Year	2006	2007	2008	2009	2010	2011	2012
a. Graduates/completers of education and training programs in this EGR:							
Vincennes University	7	7	7	7	7	7	7
IVY Tech	6	6	6	6	6	6	6
EVSC Vocational program	1	1	1	1	1	1	1
etc. (add as necessary)							
b. Other sources of entrants (other than in-migration)							
Source #1							
Source #2							
etc. (add as necessary)							
c. Total new supply	14	14	14	14	14	14	14

Supply Side Worksheet #2 ("Migration")

EGR Name:	EGR 11						
Occupation Name:	Industrial Machine Maintenance						
Occupation SOC:	49-9041						
Year	2006	2007	2008	2009	2010	2011	2012
1. Projected IN-migration of workers in this occupation to this EGR, by year							
a. From outside this EGR	0	0	0	0	0	0	0
b. From other occupations	1	1	1	1	1	1	1
2. Projected OUT-migration of workers in this occupation to this EGR, by year							
a. To places outside this EGR	1	1	1	1	1	1	1
b. Into other occupations	0	0	0	0	0	0	0
3. Net IN-Migration	0	0	0	0	0	0	0

Worksheet for Calculating Shortages or Surpluses of One Occupation

EGR Name:	EGR 11
Occupation Name:	Industrial Machine Maintenance
Occupation SOC:	49-9041

A. Lower projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		1	-5	-11	-17	-22	-27	-32
New demand during year		8	8	8	9	9	9	9
New production during year		14	14	14	14	14	14	14
Net migration during year		0	0	0	0	0	0	0
Net change during year		-6	-6	-6	-5	-5	-5	-5
Carryover to next year (+/-)	1	-5	-11	-17	-22	-27	-32	-37

B. Middle projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		3	6	10	14	19	25	32
New demand during year		17	18	18	19	20	21	22
New production during year		14	14	14	14	14	14	14
Net migration during year		0	0	0	0	0	0	0
Net change during year		3	4	4	5	6	7	8
Carryover to next year (+/-)	3	6	10	14	19	25	32	40

C. Upper projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		7	20	35	52	70	90	112
New demand during year		27	29	31	32	34	36	39
New production during year		14	14	14	14	14	14	14
Net migration during year		0	0	0	0	0	0	0
Net change during year		13	15	17	18	20	22	25
Carryover to next year (+/-)	7	20	35	52	70	90	112	137

Notes:

(1) A positive (+) carryover indicates a "shortage" of workers in this occupation. A negative (-) carryover indicates the opposite.

(2) This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Demand Side Worksheet

EGR Name:	EGR 11
Occupation Name:	Maintenance and Repair Workers
Occupation SOC:	49-9042

1. Estimated Job vacancies, end of 2005

Lower estimate	1
Middle estimate	3
Upper estimate	7

2. Projected number of job openings annually due to growth and net replacements:

Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
A. Lower projection:							
Total, all industries in EGR	44	45	46	47	48	49	50
Manufacturing (33)	37	38	39	40	41	42	43
Mining (21)	2	2	2	2	2	2	2
Utilities (22)	4	5	5	5	5	5	5
etc.							
B. Middle projection:							
Total, all industries in EGR	94	97	101	105	109	114	118
Manufacturing (33)	71	73	76	79	82	86	89
Mining (21)	14	15	15	16	16	17	18
Utilities (22)	9	10	10	11	11	11	12
etc.							
C. Upper projection:							
Total, all industries in EGR	149	158	167	177	188	199	211
Manufacturing (33)	104	111	117	124	132	139	148
Mining (21)	30	32	33	35	38	40	42
Utilities (22)	15	16	17	18	19	20	21
etc.							

Notes:

This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probablity is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Supply Side Worksheet #1 ("Production")

EGR Name:	EGR 11						
Occupation Name:	Maintenance and Repair Workers						
Occupation SOC:	49-9042						
Projected "production" of new entrants into this occupation, by year							
Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
a. Graduates/completers of education and training programs in this EGR:							
Vincennes University	26	26	26	26	26	26	26
IVY Tech	22	22	22	22	22	22	22
EVSC Vocational Programs	2	2	2	2	2	2	2
etc. (add as necessary)							
b. Other sources of entrants (other than in-migration)							
Source #1							
Source #2							
etc. (add as necessary)							
c. Total new supply	**50**	**50**	**50**	**50**	**50**	**50**	**50**

Supply Side Worksheet #2 ("Migration")

EGR Name:	EGR 11						
Occupation Name:	Maintenance and Repair Workers						
Occupation SOC:	49-9042						
Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
1. Projected IN-migration of workers in this occupation to this EGR, by year							
a. From outside this EGR	3	3	3	3	3	3	3
b. From other occupations	1	1	1	1	1	1	1
2. Projected OUT-migration of workers in this occupation to this EGR, by year							
a. To places outside this EGR	1	1	1	1	1	1	1
b. Into other occupations	3	3	3	3	3	3	3
3. Net IN-Migration	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Worksheet for Calculating Shortages or Surpluses of One Occupation

EGR Name:	EGR-11
Occupation Name:	Maintenance and Repair Workers
Occupation SOC:	49-9042

A. Lower projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		1	-5	-10	-14	-17	-19	-20
New demand during year		44	45	46	47	48	49	50
New production during year		50	50	50	50	50	50	50
Net migration during year		0	0	0	0	0	0	0
Net change during year		-6	-5	-4	-3	-2	-1	0
Carryover to next year (+/-)	1	-5	-10	-14	-17	-19	-20	-20

B. Middle projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		3	47	94	145	200	259	323
New demand during year		94	97	101	105	109	114	118
New production during year		50	50	50	50	50	50	50
Net migration during year		0	0	0	0	0	0	0
Net change during year		44	47	51	55	59	64	68
Carryover to next year (+/-)	3	47	94	145	200	259	323	391

C. Upper projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		7	106	214	331	458	596	745
New demand during year		149	158	167	177	188	199	211
New production during year		50	50	50	50	50	50	50
Net migration during year		0	0	0	0	0	0	0
Net change during year		99	108	117	127	138	149	161
Carryover to next year (+/-)	7	106	214	331	458	596	745	906

Notes:

(1) A positive (+) carryover indicates a "shortage" of workers in this occupation. A negative (-) carryover indicates the opposite.

(2) This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Demand Side Worksheet

EGR Name:	EGR 11
Occupation Name:	Maintenance Workers, Machinery
Occupation SOC:	49-9043

1. Estimated Job vacancies, end of 2005

Lower estimate	1
Middle estimate	3
Upper estimate	7

2. Projected number of job openings annually due to growth and net replacements:

Year	2006	2007	2008	2009	2010	2011	2012
A. Lower projection:							
Total, all industries in EGR	3	3	3	3	3	3	3
Manufacturing (33)	1	1	1	1	1	1	1
Mining (21)	1	1	1	1	1	1	1
Utilities (22)	1	1	1	1	1	1	1
etc.							
B. Middle projection:							
Total, all industries in EGR	5	5	5	6	6	6	6
Manufacturing (33)	1	1	1	2	2	2	2
Mining (21)	3	3	3	3	3	3	3
Utilities (22)	1	1	1	1	1	1	1
etc.							
C. Upper projection:							
Total, all industries in EGR	8	8	9	9	10	11	11
Manufacturing (33)	2	2	3	3	3	3	3
Mining (21)	4	4	4	4	4	5	5
Utilities (22)	2	2	2	2	3	3	3
etc.							

Notes:

This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Supply Side Worksheet #1 ("Production")

EGR Name:	EGR 11
Occupation Name:	Maintenance Workers, Machinery
Occupation SOC:	49-9043

Projected "production" of new entrants into this occupation, by year

Year	2006	2007	2008	2009	2010	2011	2012
a. Graduates/completers of education and training programs in this EGR:							
Vincennes University	2	2	2	2	2	2	2
IVY Tech	2	2	2	2	2	2	2
EVSC Vocational Programs	0	0	0	0	0	0	0
etc. (add as necessary)							
b. Other sources of entrants (other than in-migration)							
Source #1							
Source #2							
etc. (add as necessary)							
c. Total new supply	**4**	**4**	**4**	**4**	**4**	**4**	**4**

Supply Side Worksheet #2 ("Migration")

EGR Name:	EGR 11
Occupation Name:	Maintenance Workers, Machinery
Occupation SOC:	49-9043

Year	2006	2007	2008	2009	2010	2011	2012
1. Projected IN-migration of workers in this occupation to this EGR, by year							
a. From outside this EGR	0	0	0	0	0	0	0
b. From other occupations	0	0	0	0	0	0	0
2. Projected OUT-migration of workers in this occupation to this EGR, by year							
a. To places outside this EGR	0	0	0	0	0	0	0
b. Into other occupations	0	0	0	0	0	0	0
3. Net IN-Migration	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Worksheet for Calculating Shortages or Surpluses of One Occupation

EGR Name:	EGR 11
Occupation Name:	Maintenance Workers, Machinery
Occupation SOC:	49-9043

A. Lower projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		1	0	-1	-2	-3	-4	-5
New demand during year		3	3	3	3	3	3	3
New production during year		4	4	4	4	4	4	4
Net migration during year		0	0	0	0	0	0	0
Net change during year		-1	-1	-1	-1	-1	-1	-1
Carryover to next year (+/-)	1	0	-1	-2	-3	-4	-5	-6

B. Middle projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		3	4	5	6	8	10	12
New demand during year		5	5	5	6	6	6	6
New production during year		4	4	4	4	4	4	4
Net migration during year		0	0	0	0	0	0	0
Net change during year		1	1	1	2	2	2	2
Carryover to next year (+/-)	3	4	5	6	8	10	12	14

C. Upper projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		7	11	15	20	25	31	38
New demand during year		8	8	9	9	10	11	11
New production during year		4	4	4	4	4	4	4
Net migration during year		0	0	0	0	0	0	0
Net change during year		4	4	5	5	6	7	7
Carryover to next year (+/-)	7	11	15	20	25	31	38	45

Notes:

(1) A positive (+) carryover indicates a "shortage" of workers in this occupation. A negative (-) carryover indicates the opposite.

(2) This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Demand Side Worksheet

EGR Name:	EGR 11
Occupation Name:	Registered Nurse
Occupation SOC:	29-1111

1. Estimated Job vacancies, end of 2005

Lower estimate	10
Middle estimate	15
Upper estimate	20

2. Projected number of job openings annually due to growth and net replacements:

Year	2006	2007	2008	2009	2010	2011	2012
A. Lower projection:							
Total, all industries in EGR	159	164	170	176	182	189	195
Hospital (622)	99	102	105	109	113	117	121
Ambulatory Care (621)	46	48	49	51	53	55	57
Nursing Care Facilities (623)	14	15	15	16	16	17	18
etc.							
B. Middle projection:							
Total, all industries in EGR	184	192	199	207	215	224	233
Hospital (622)	114	119	123	128	133	139	144
Ambulatory Care (621)	53	56	58	60	63	65	68
Nursing Care Facilities (623)	17	17	18	19	19	20	21
etc.							
C. Upper projection:							
Total, all industries in EGR	264	279	294	310	327	345	364
Hospital (622)	164	173	182	192	203	214	226
Ambulatory Care (621)	77	81	85	90	95	100	106
Nursing Care Facilities (623)	24	25	26	28	29	31	33
etc.							

Notes:

This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Supply Side Worksheet #1 ("Production")

EGR Name:	EGR 11
Occupation Name:	Registered Nurse
Occupation SOC:	29-1111

Projected "production" of new entrants into this occupation, by year

Year	2006	2007	2008	2009	2010	2011	2012
a. Graduates/completers of education and training programs in this EGR:							
USI	90	90	60	60	60	60	60
Vincennes University	80	80	80	80	80	80	80
IVY Tech	50	50	50	50	50	50	50
University Evansville	20	20	20	20	20	20	20
b. Other sources of entrants (other than in-migration)							
Source #1							
Source #2							
etc. (add as necessary)							
c. Total new supply	**240**	**240**	**210**	**210**	**210**	**210**	**210**

Supply Side Worksheet #2 ("Migration")

EGR Name:	EGR 11
Occupation Name:	Registered Nurse
Occupation SOC:	29-1111

Year	2006	2007	2008	2009	2010	2011	2012
1. Projected IN-migration of workers in this occupation to this EGR, by year							
a. From outside this EGR	13	13	13	13	13	13	13
b. From other occupations	3	3	3	3	3	3	3
2. Projected OUT-migration of workers in this occupation to this EGR, by year							
a. To places outside this EGR	75	75	67	67	67	67	67
b. Into other occupations	5	5	5	5	5	5	5
3. Net IN-Migration	**-64**	**-64**	**-56**	**-56**	**-56**	**-56**	**-56**

Worksheet for Calculating Shortages or Surpluses of One Occupation

EGR Name:	EGR 11
Occupation Name:	Registered Nurse
Occupation SOC:	29-1111

A. Lower projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		10	-7	-19	-3	19	47	82
New demand during year		159	164	170	176	182	189	195
New production during year		240	240	210	210	210	210	210
Net migration during year		-64	-64	-56	-56	-56	-56	-56
Net change during year		-17	-12	16	22	28	35	41
Carryover to next year (+/-)	10	-7	-19	-3	19	47	82	123

B. Middle projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		15	23	39	84	137	198	268
New demand during year		184	192	199	207	215	224	233
New production during year		240	240	210	210	210	210	210
Net migration during year		-64	-64	-56	-56	-56	-56	-56
Net change during year		8	16	45	53	61	70	79
Carryover to next year (+/-)	15	23	39	84	137	198	268	347

C. Upper projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		20	108	211	351	507	680	871
New demand during year		264	279	294	310	327	345	364
New production during year		240	240	210	210	210	210	210
Net migration during year		-64	-64	-56	-56	-56	-56	-56
Net change during year		88	103	140	156	173	191	210
Carryover to next year (+/-)	20	108	211	351	507	680	871	1081

Notes:

(1) A positive (+) carryover indicates a "shortage" of workers in this occupation. A negative (-) carryover indicates the opposite.

(2) This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.
B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.
C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Demand Side Worksheet

EGR Name:	EGR 11						
Occupation Name:	Licensed Practical Nurse						
Occupation SOC:	29-2061						
1. Estimated Job vacancies, end of 2005							
Lower estimate	5						
Middle estimate	12						
Upper estimate	20						
2. Projected number of job openings annually due to growth and net replacements:							
Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
A. Lower projection:							
Total, all industries in EGR	64	66	69	71	73	76	79
Ambulatory Care	19	19	20	21	21	22	23
Hospital	20	21	22	23	23	24	25
Nursing Care Facility	25	26	27	28	28	30	31
etc.							
B. Middle projection:							
Total, all industries in EGR	74	77	80	84	87	90	94
Ambulatory Care	21	22	23	24	25	26	27
Hospital	24	25	26	27	28	29	30
Nursing Care Facility	29	30	31	33	34	35	37
etc.							
C. Upper projection:							
Total, all industries in EGR	107	112	119	125	132	139	147
Ambulatory Care	31	32	35	36	38	40	43
Hospital	34	36	38	40	42	44	47
Nursing Care Facility	42	44	46	49	51	54	57
etc.							

Notes:

This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

Supply Side Worksheet #1 ("Production")

EGR Name:	EGR 11						
Occupation Name:	Licensed Practical Nurse						
Occupation SOC:	29-2061						
Projected "production" of new entrants into this occupation, by year							
Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
a. Graduates/completers of education and training programs in this EGR:							
Vincennes University	45	45	45	45	45	45	45
IVY Tech	30	30	30	30	30	30	30
etc. (add as necessary)							
b. Other sources of entrants (other than in-migration)							
Source #1							
Source #2							
etc. (add as necessary)							
c. Total new supply	**75**	**75**	**75**	**75**	**75**	**75**	**75**

Supply Side Worksheet #2 ("Migration")

EGR Name:	EGR 11						
Occupation Name:	Licensed Practical Nurse						
Occupation SOC:	29-2061						
Year	**2006**	**2007**	**2008**	**2009**	**2010**	**2011**	**2012**
1. Projected IN-migration of workers in this occupation to this EGR, by year							
a. From outside this EGR	4	4	4	4	4	4	4
b. From other occupations	1	1	1	1	1	1	1
2. Projected OUT-migration of workers in this occupation to this EGR, by year							
a. To places outside this EGR	15	15	15	15	15	15	15
b. Into other occupations	2	2	2	2	2	2	2
3. Net IN-Migration	**-12**	**-12**	**-12**	**-12**	**-12**	**-12**	**-12**

Worksheet for Calculating Shortages or Surpluses of One Occupation

EGR Name:	EGR 11
Occupation Name:	Licensed Practical Nurse
Occupation SOC:	29-2061

A. Lower projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		5	6	9	15	23	33	46
New demand during year		64	66	69	71	73	76	79
New production during year		75	75	75	75	75	75	75
Net migration during year		-12	-12	-12	-12	-12	-12	-12
Net change during year		1	3	6	8	10	13	16
Carryover to next year (+/-)	5	6	9	15	23	33	46	62

B. Middle projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		12	23	37	54	75	99	126
New demand during year		74	77	80	84	87	90	94
New production during year		75	75	75	75	75	75	75
Net migration during year		-12	-12	-12	-12	-12	-12	-12
Net change during year		11	14	17	21	24	27	31
Carryover to next year (+/-)	12	23	37	54	75	99	126	157

C. Upper projection:

Total, all industries in EGR

Year	2005	2006	2007	2008	2009	2010	2011	2012
Carryover from last year (+/-)		20	64	113	169	231	300	376
New demand during year		107	112	119	125	132	139	147
New production during year		75	75	75	75	75	75	75
Net migration during year		-12	-12	-12	-12	-12	-12	-12
Net change during year		44	49	56	62	69	76	84
Carryover to next year (+/-)	20	64	113	169	231	300	376	460

Notes:

(1) A positive (+) carryover indicates a "shortage" of workers in this occupation. A negative (-) carryover indicates the opposite.

(2) This worksheet allows for "ranges" of estimates and projections in recognition of the fact that these values cannot be known with certainty. The meanings of the words "Lower," "Middle," and "Upper" are as follows:

A. "Lower" means that your EGR thinks the probablity is no more than 25% that the true value lies below it.

B. "Middle" means that your EGR thinks the probability is about equal that the true value lies either below it or above it.

C. "Upper" means that your EGR thinks the probablity is no more than 25% that the true value lies above it.

What Skill Levels are Required for Targeted Occupations Using Work Keys and How do Job Applicants Compare?

Work Keys Profile Skill Level Requirements for EGR 11 Industrial Maintenance And Related Technical Occupations.*

Work Keys Skill Level Requirement	Applied Mathematics	Applied Technology	Business Writing	Listening	Locating Information	Reading for Information	Observation	Teamwork	Writing
Maximum	7	6	4	1	6	7	6	5	2
Minimum	3	4	3	1	3	4	4	3	2
Median	4	6	3.5	1	5	5	5	4	2
Average	4.4	5.5	3.5	1.0	5.1	4.9	4.9	3.8	2.0
Occupations Requiring this Skill	21.0	14.0	4.0	1.0	24.0	23.0	25.0	24.0	1.0

* Skill requirements for 25 occupations from 13 businesses in EGR 11

Percent Of Assessed Job Applicants At Each Work Keys Skill Level, December 2005

	Work Keys Assessments				
	Applied Math	Locating Information	Observation	Reading for Information	Team Work
Total Assessments	5971	6623	6482	4975	3005
Percent of total scoring at level <3	5.0%	9.0%	4.5%	2.3%	3.5%
Percent of total scoring at level 3	13.2%	16.4%	16.4%	3.2%	28.5%
Percent of total scoring at level 4	23.3%	47.8%	39.8%	27.0%	40.4%
Percent of total scoring at level 5	31.5%	24.5%	33.3%	32.8%	26.5%
Percent of total scoring at level 6	20.2%	2.3%	6.0%	26.6%	1.1%
Percent of total scoring at level 7	6.7%			8.1%	
Percent of total scoring at level ≥5	58.5%	26.8%	39.3%	67.5%	27.6%
Percent of total scoring at level ≥6	27.0%	2.3%	6.0%	34.7%	1.1%

How Does the Consortium Represent the Entire Region?

Representative		Dubois	Gibson	Knox	Perry	Pike	Posey	Spencer	Vanderburgh	Warrick
Les Bulter*	General Electric						✓			
Sandra Reed*	Indiana Economic Development Corporation								✓	
Tom Horstman*	WorkOne								✓	
Ken Eskridge*	CTA Consultant								✓	
Mary K. Oswald*	Goodwill Industries								✓	
Rose Castle*	Warrick Co. Dev. Corp.									✓
Kim Howard*	Small Business Dev. Corp.								✓	
Dick Lynch*	Vectren Corporation								✓	
Bill Bennett*	DWD								✓	
Lu Porter*	Integra Bank								✓	
Dr. Ed Jones*	University of Southern IN								✓	
Jim Messmer*	Vincennes University			✓						
Jim Heck*	ALF-CIO, Labor Training Institute									✓
Roger Tomes*	Cinergy/PSI			✓						
Lisa Dillon*	Indianapolis Power and Light					✓				
Franka Siscel*	Career Choices Inc.								✓	
Paula Pinkstaff*	Toyota Motor Manufacturing of Indiana		✓							
Cheryl Steinbacher*	Integra Bank								✓	
Scott Harrell*	Rexam Closures and Containers								✓	
Ronnie Cantu*	Azteca Milling								✓	
Cathy Boatman*	WorkOne								✓	
Dan Schenk*	IVY Tech Community College								✓	
Suzanne Crouch*	Vanderburgh County Commissioner								✓	
Larry Sutterer*	Superior Essex			✓						
Tammy Thompson*	Lincoln Hills Dev. Corp.				✓			✓		
Robin Hamme*	Accuride Corp.								✓	
Andy Guarino*	Vanderburgh School Corp								✓	
Deborah Castrale*	Whirlpool Corp.								✓	
Terry Lock*	Perry Co. Commissioner				✓					

Representative		Dubois	Gibson	Knox	Perry	Pike	Posey	Spencer	Vanderburgh	Warrick
Gary Gentry*	Knox Co. Dev. Corp.			✓						
Jeff Bixby*	Whirlpool Corp.								✓	
Jimmie Morrison*	Fifth Third Bank			✓						
Jenny Dearwester*	Southern IN Rural Dev.					✓				
Nancy Davisson*	WorkOne			✓						
Joyce Memering	Memering Construction & Twin Rivers Voc. Coop			✓						
Dr. Darrin Sorrells	Oakland City University		✓							
Robert Grewe*	Dubois Co. Area Dev. Corporation	✓								
Todd Garrison*	Kimball International	✓								
John Burger	Dubois Co. Commissioner Haysville Feedmill	✓								
Cindy Gaskins*	Sisson Steel					✓				
JoAnn Kappell	Experience Works, Inc.						✓			
Nancy Eckerle*	Jasper Chamber of Commerce	✓								
Sherrell Marginet*	Gibson Co. Commissioner		✓							
Susan Carperter*	Vocational Rehabilitation			✓						
Linda Goeppner*	Jasper Engines	✓								
Gary Kinnaman*	Carpenter JATF					✓				
David Reed	IRCC			✓						
Gail Kemp*	Mayor of Huntingburg	✓								
Greg Wathen*	Perry Co. Dev. Corp.				✓					
Beth Ann Packer	Mayor of Rockport							✓		
Mary K. Cardinal*	SINE		✓							
Judy Weatherholt	Warrick Co. Dev. Corp.									✓
Jerry Yezbick	Southwest WIB								✓	
Jeff Amos*	Southwest WIB								✓	
Linda Jones*	Southwest WIB								✓	
Chuck Roche*	Shawnee Trace WIB			✓						
Brent Woolwine*	Vincennes University			✓						
Nancy Begle*	Vincennes University	✓								
Sheila Hess	Vincennes University			✓						
Claudia Rickardt	St. Marys Hospital								✓	
Nadine Coudret	University of Southern IN								✓	
Phil Wilzbacher	Port of Mt. Vernon						✓			
Nancy Burns	University of Southern IN								✓	
Matt Meadors	Chamber of Commerce								✓	

Representative		Dubois	Gibson	Knox	Perry	Pike	Posey	Spencer	Vanderburgh	Warrick
Connie Fowler	IEDC								✓	
Ron Keeping	Vectren								✓	
Christi K. Bradley	West Pharmacy Service								✓	
Michael Cockrum	Adult Education Works								✓	
Ruth Ann Sellers	American Electric Power							✓		
Jana Vieck	VU School of Nursing			✓						
Julie Marchino	Good Samaritan Hospital			✓						

*Denotes attendance at initial Consortia meeting on 10-4-05